

CLAIMS

We claim as our invention:

1. A remotely controlled toy vehicle comprising:
 - a model vehicle;
 - a first wireless communication apparatus having a first transmitter remote from the model vehicle for sending control signals and having a first receiver attached to the model vehicle for receiving the control signals;
 - a control apparatus attached to the model vehicle and operable to control the direction of travel of the model vehicle in response to the control signals;
- 10 a video signal generating apparatus connected to the model vehicle and comprising a camera operable to generate video signals representative of a view from the perspective of the model vehicle;
 - a second wireless communication apparatus connected to the video signal generating apparatus and having a second transmitter attached to the model vehicle and operable to transmit the video signals to a second receiver remote from the model vehicle;
 - 15 a portable video display device connected to the second receiver and operable to display an image corresponding to the view from the perspective of the model vehicle.
- 20 2. The toy vehicle of claim 1, further comprising:
 - a sensor for producing a position signal responsive to a physical input provided by a viewer of the portable video display device;
 - wherein the video signal generating apparatus further comprises a positioning device adapted for moving the camera within the model vehicle in response to the position signal.
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3. A kit for use with a remotely controlled toy vehicle, the kit comprising:

a vehicle portion adapted for attachment to the toy vehicle, the vehicle portion comprising a camera and a transmitter connected to the camera and operable to transmit wireless signals responsive to a view from the perspective of the toy vehicle;

5 an operator portion adapted for hands free viewing by an operator of the toy vehicle, the operator portion comprising a receiver and a video display device and operable to receive the wireless signals and to generate 10 an image corresponding to the view from the perspective of the toy vehicle.

15 4. The kit of claim 3, wherein the vehicle portion comprises two cameras and the operator portion comprises two video display devices for generating a stereo-optic image corresponding to the three dimensional view from the perspective of the toy vehicle.

5. A racing game comprising:

- a scale model track;
- a plurality of racing vehicles adapted to operate on the scale model track;

5 a plurality of remote controllers, each remote controller adapted to transmit a control signal to a respective one of the racing vehicles to control the movement of that racing vehicle in response to actions of a user;

10 a video camera apparatus attached to each of the plurality of racing vehicles, each video camera apparatus operable to transmit a video signal responsive to a stereo-optic view of the scale model track from the perspective of the respective racing vehicle;

15 a plurality of video headsets, each headset adapted to receive the video signal from a respective video camera apparatus and to display a stereo-optic image representative of the view of the scale model track from the perspective of the respective racing vehicle for viewing by the user while operating the respective remote vehicle.

20 6. The racing game of claim 5, further comprising an Internet communication apparatus for transmitting the control signals and video signals via the Internet to enable the plurality of remote controllers and plurality of video headsets to be used from a plurality of locations remote from a location of the scale model track.

7. A method of providing entertainment to attendees at an event, the method comprising:

providing a plurality of cameras at a plurality of locations at the event for producing a plurality of video signals;

5 transmitting wireless communication signals corresponding to the plurality of video signals via a transmitter at the event; and

providing a plurality of portable display units each containing a receiving device and a video display device, the portable display units adapted for receiving the wireless communication signals directly from the 10 transmitter and for displaying images responsive to selected ones of the video signals for personal viewing by attendees at the event.

8. The method of claim 7, further comprising:

providing a pair of cameras at each of the plurality of locations at 15 the event for producing a plurality of stereo-optic video signals;

transmitting wireless communications signals corresponding to the plurality of stereo-optic video signals via the wireless communications system; and

20 providing the personal display units with stereo-optic video display devices for displaying three dimensional images for personal viewing by the attendees.

9. The method of claim 7, further comprising offering the personal display units for rent to the attendees for use during the event.

25 10. The method of claim 7, further comprising transmitting wireless communications signals corresponding to predetermined content via the wireless communications system for selected viewing by the attendees.

11. The method of claim 7, further comprising transmitting wireless communications signals corresponding to advertising content via the wireless communications system for viewing by the attendees.

5 12. An apparatus for providing video information comprising: at least one camera adapted for capturing at least one scene at an event and for producing at least one respective video signal responsive to the at least one scene;

10 a transmitter for transmitting at least one wireless communication signal corresponding to the at least one video signal;

15 a plurality of portable display units each containing a receiving device and a video display device for receiving the at least one wireless communication signal directly from the transmitter and for displaying images responsive to the at least one wireless communication signal for personal viewing of the at least one scene by attendees at the event.

13. The apparatus of claim 12, wherein each personal display unit comprises a headset for supporting the receiving device and the video display device.

20 14. A video device comprising:

a headset;

a video display device attached to the headset and operable to display a video image responsive to an input signal;

25 an input device attached to the headset and operable to provide a plurality of signals corresponding to a plurality of scenes; and

a selector attached to the headset for selectively providing ones of the plurality of signals to the video display device as the input signal for display of a corresponding video image to a user of the headset.

15. The device of claim 14, wherein the input device comprises a wireless receiver adapted to receive a wireless signal responsive to a plurality of video signals.

5 16. The device of claim 15, wherein the input device further comprises a camera adapted for attachment to the headset.

10 17. A video communications apparatus comprising:
a camera adapted for hands-free portability by a user, the camera
operable to produce a video signal;
a display unit adapted for hands-free portability by the user and
connected to the camera for displaying an image corresponding to the
video signal for viewing by the user; and
a transmitting device adapted for hands-free portability by the user
and connected to the camera for transmitting a wireless communication
signal responsive to the video signal.

15 18. The apparatus of claim 17, wherein the camera is an infrared
camera and the video signal and image are responsive to infrared
radiation.

20 19. The apparatus of claim 17, further comprising a base unit,
the base unit further comprising a receiver for receiving the wireless
communication signal and a display device for displaying an image
responsive to the wireless communication signal.

20. A wireless video apparatus comprising:

5 a plurality of portable personal video units, each unit comprising a camera for producing a video signal and a display unit for displaying an image responsive to the video signal and a transmitter for transmitting a wireless communication signal responsive to the video signal;

10 a receiver associated with each portable personal video unit adapted for receiving the wireless communication signals transmitted from other respective portable personal video units; and

15 a selector associated with each portable personal video unit and connected to the respective receiver and display unit for selecting an image for display on the display unit corresponding to a selected one of the video signals produced by others of the portable personal video units.

21. The apparatus of claim 20, further comprising a base unit

15 comprising:

a receiver for receiving the wireless communication signals transmitted by each of the plurality of portable personal video units; and

a display device for displaying images responsive to selected ones of the wireless communication signals.

20 22. The apparatus of claim 20, wherein the camera is an infrared camera and the video signal and image are responsive to infrared radiation.

23. An entertainment device comprising:

- a plurality of vehicles responsive to control signals;
- a plurality of controllers operable by a user to produce control signals for controlling respective ones of the plurality of vehicles;
- 5 a video transmitting device attached to each of the plurality of vehicles and operable to produce a video signal responsive to a view from a perspective of the respective vehicle;
- a plurality of portable video display devices adapted to receive video signals from respective ones of the video transmitting devices and to
- 10 display respective images for personal viewing by the respective user operating the control device for the respective vehicle; and
- an information network for communicating the control signals and the video signals to allow the users to control the respective vehicles from locations remote from the vehicles and remote from other users while
- 15 viewing an image from the perspective of the respective vehicle being controlled.

24. A wireless video apparatus comprising:

- a pair of video cameras adapted to be positioned adjacent each other to capture a stereo-optic view of a scene;
- a transmitting device connected to each video camera for transmitting a wireless video signal responsive to the view from the perspective of the respective video camera;
- a portable receiver for receiving the wireless video signals;
- 25 a pair of portable video display devices for cooperatively displaying to an observer a stereo-optic image responsive to the wireless video signals and observable as a three dimensional view of the scene from the perspective of the pair of video cameras.

25. The wireless video apparatus of claim 24, further comprising:
a plurality of pairs of cameras adapted to be positioned to receive
respective stereo-optic views of a plurality of scenes;

5 a transmitting device connected to each video camera for
transmitting a respective wireless video signal responsive to the view from
the perspective of the video camera;
a selector associated with the portable receiver for selectively
displaying to the observer a stereo-optic image from the perspective of a
10 selected pair of cameras.

26. The personal wireless video apparatus of claim 24, further
comprising:

15 a positioning device attached to the pair of cameras for moving the
pair of cameras relative to the scene in response to a position signal;
a wireless receiver connected to the positioning device and adapted
to provide the position signal in response to a wireless view signal;
a portable wireless transmitter for transmitting the wireless view
signal in response to a position input signal;
20 a portable controller connected to the portable wireless transmitter
for producing the position input signal in response to a physical input
provided by the observer.

27. A method of providing video information, the method comprising:

providing a plurality of cameras at a plurality of locations for producing a plurality of video signals;

5 transmitting wireless communication signals corresponding to the plurality of video signals via a wireless communications system; and

providing a portable display unit containing a receiving device and a video display device, the portable display unit adapted for directly and locally receiving the wireless communication signals and for displaying

10 images responsive to selected ones of the video signals for personal viewing by a user of the portable display unit.

28. The method of claim 27, further comprising:

providing a pair of cameras at each of the plurality of locations for producing a plurality of stereo-optic video signals;

transmitting wireless communications signals corresponding to the plurality of stereo-optic video signals via the wireless communications system; and

20 providing the personal display unit with stereo-optic video display devices for displaying three dimensional images for personal viewing by the user.

29. A wireless video apparatus comprising:

a video camera adapted to be positioned to capture a view of a

25 scene;

a transmitting device connected to the video camera for transmitting a wireless video signal responsive to the view from the perspective of the video camera;

30 a portable receiver for receiving the wireless video signal directly from the transmitting device; and

a portable video display device for displaying to an observer an image responsive to the wireless video signal and corresponding to a view of the scene from the perspective of the camera.

5 30. The wireless video apparatus of claim 29, further comprising:
a plurality of cameras adapted to be positioned to receive respective views of a plurality of scenes;

10 a transmitting device connected to each video camera for transmitting a respective wireless video signal responsive to the view from the perspective of the video camera;

15 a selector associated with the portable receiver for selectively displaying to the observer an image from the perspective of a selected camera.

20 31. The personal wireless video apparatus of claim 29, further comprising:

25 a positioning device attached to the camera for moving the camera relative to the scene in response to a position signal;

30 a wireless receiver connected to the positioning device and adapted to provide the position signal in response to a wireless view signal;

35 a portable wireless transmitter for transmitting the wireless view signal in response to a position input signal;

40 a portable controller connected to the portable wireless transmitter for producing the position input signal in response to a physical input provided by the observer.

32. The wireless video apparatus of claim 29, further comprising:
the video camera comprising a pair of spaced apart video cameras
disposed to capture respective views of the same scene;
the portable video display device comprising a pair of spaced apart
video display devices adapted for displaying to the observer a three
dimensional view of the scene from the perspective of the pair of spaced
apart video cameras.